

**Table 1: Candidates for Random Selection Second Round**

| No. | Chemical Name   | CAS Number | Remarks  |
|-----|---|------------|--|
| 1.  | acetoxymethylphenyl-nitrosamine                                 | 81943375   | Used for research on carcinogenesis  |
| 2.  | allyl isothiocyanate  | 57067      | Dog and cat repellent; flavoring   |
| 3.  | allyl isovalerate   | 2835394    | Fragrance in cosmetics, flavoring agent  |
| 4.  | 3-amino-4-ethoxyacetanilide                                     | 17026812   | Intermediate for synthesis of dyes   |
| 5.  | 2-amino-5-nitrothiazole   | 121664     | Antiprotozoan drug for chickens  |
| 6.  | 11-aminoundecanoic acid   | 2432997    | Initiator in nylon synthesis   |
| 7.  | anthanthrene  | 191264     | Component of fossil fuels; product of incomplete combustion  |
| 8.  | antipyrine (phenazone)  | 60800      | Analgesic drug   |
| 9.  | atrazine  | 1912249    | Herbicide with extensive use   |
| 10. | p-benzoquinone dioxime (p-quinone dioxime)                      | 105113     | Accelerator in rubber manufacture  |
| 11. | 1-benzoyl-2,6-dimethyl-4-nitrosopiperazine                      | 61034400   | Used for research on carcinogenesis  |
| 12. | 4-bis(2-hydroxyethyl)amino-2-(5-nitro-2-thienyl)-quinazoline    | 33372393   | Evaluated but not approved as an anti-helminthic drug  |
| 13. | bis(4-chlorophenyl)sulfone (p,p'-dichlorophenylsulfone)         | 80079      | Used in the synthesis of plastics  |
| 14. | bleomycin   | 11056067   | Prescription drug used to treat certain types of cancer  |
| 15. | 2-bromo-2-methylpropane (tert-butyl bromide)                    | 507197     | Intermediate for chemical synthesis  |
| 16. | 1-butanol (n-butanol, n-butyl alcohol)                          | 71363      | Solvent (e.g., for fats and waxes); used in manufacturing (e.g., resins, rayon, detergents); used in microscopy for paraffin imbedding |
| 17. | 1-butylhydrazine hydrochloride (n-butylhydrazine hydrochloride) | 56795654   | Used for research on carcinogenesis  |
| 18. | C.I. acid blue 9 and its salts                                  | 2650182    | Dye for nylon, wool, other materials   |
| 19. | C.I. acid orange 3  | 6373746    | Dye for nylon, wool, other materials   |
| 20. | C.I. acid red 51  | 16423680   | Food dye   |
| 21. | C.I. vat yellow 4   | 128665     | Dye for cotton, silk, wool, paper  |
| 22. | carbamazepine   | 298464     | Prescription drug used for treatment of epilepsy and trigeminal neuralgia  |
| 23. | carboxymethylnitrosourea (N-carbamoyl-N-nitroso-glycine)        | 60391926   | Used for research on carcinogenesis  |
| 24. | chlorinated paraffins (C23; 43% chlorine)                       | 108171273  | Used in waxes  |
| 25. | 4-chloro-4'-aminodiphenyl-                                      | 101791     | Additive to lubricants, flame retardants   |

| No. | Chemical Name  | CAS Number | Remarks   |
|-----|--|------------|---|
|     | ether  |            | in rubber   |
| 26. | chloromethane (methyl chloride)                            | 74873      | Extensively used for silicone rubber synthesis  |
| 27. | 3-chloromethylpyridine hydrochloride                       | 6959484    | Chemical research   |
| 28. | 4-chloro-m-phenylenediamine                                | 5131602    | Chemical research   |
| 29. | chromium picolinate  | ---        | Nutritional supplement containing the essential trace element chromium  |
| 30. | chrysoidine (C.I. solvent orange 3)                        | 532821     | Dye for silk, cotton, oils, waxes   |
| 31. | citral   | 5392405    | Chemical intermediate (e.g., in synthesis of vitamin A); flavoring and perfuming agent  |
| 32. | trans-crotonaldehyde                                       | 123739     | Chemical intermediate in the manufacture of a variety of chemicals; solvent; fuel-gas warning agent; alcohol denaturant; leather tanning agent; used in locating breaks and leaks in pipes. |
| 33. | D&C yellow no. 11 (C.I. solvent yellow 33)                 | 8003223    | Pigment and dye   |
| 34. | dehydroretronecine   | 23107122   | Natural product of certain plants   |
| 35. | diallate   | 2303164    | Selective herbicide   |
| 36. | dibromomannitol  | 488415     | Evaluated but not approved as anti-neoplastic drug  |
| 37. | diclofop-methyl  | 51338273   | Herbicide   |
| 38. | N,N'-diethylthiourea                                       | 105555     | Accelerator for rubber production   |
| 39. | diftalone  | 21626891   | Evaluated but not approved as anti-inflammatory drug  |
| 40. | diltiazem  | 42399417   | Prescription drug for treatment of hypertension and angina  |
| 41. | 3,3'-dimethoxybenzidine-4,4'-diisocyanate                  | 91930      | Not produced commercially in 1977. Current uses unknown   |
| 42. | dimethyldiazene-1-oxide (methylazoxymethane/azoxy methane) | 25843452   | Used for research on carcinogenesis   |
| 43. | estradiol mustard  | 22966796   | Evaluated but not approved as anti-neoplastic drug  |
| 44. | N'-ethyl-N-methyl-N-nitrosourea                            | 72479131   | Used for research on carcinogenesis   |
| 45. | N'-ethyl-N-nitrosobutylamine                               | 4549444    | Used for research on carcinogenesis   |
| 46. | 4-ethylsulfonylnaphthalene-1-sulfonamide                   | 842002     | Evaluated but not approved as a drug  |
| 47. | FD&C blue no. 2  | 860220     | Food coloring   |
| 48. | FD&C green no. 1 (guinea                                   | 4680788    | Dye for wool, silk, leather, paper;   |

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|-----|--|------------|---|
|     | green)   |            | cosmetic pigment  |
| 49. | fipronil   | 120068373  | Insecticide   |
| 50. | hexachlorobutadiene  | 87683      | Solvent for elastomers; heat-transfer liquid; transformer & hydraulic fluid; wash liquor for removing C4 & higher hydrocarbons. |
| 51. | ICRF-159   | 21416875   | Experimental drug (not approved)  |
| 52. | imidacloprid   | 105827789  | Insecticide   |
| 53. | isophosphamide (ifosfamide)                                | 3778732    | Prescription drug used to treat certain cancers   |
| 54. | lovastatin   | 75330755   | Prescription drug used for treatment of hypercholesterolemia  |
| 55. | malathion  | 121755     | Insecticide   |
| 56. | mecoprop & its salts (including methoxone sodium)          | 7085190    | Herbicide   |
| 57. | 4-methoxy-2-methyl-benzeneamine (m-cresidine)              | 102501     | No commercial use in 1982. Current uses unknown.  |
| 58. | 6-methoxy-2-nitronaphtho-[1,8-bc]pyran                     | 10502399   | Used for research on carcinogenesis   |
| 59. | methoxychlor   | 72435      | Insecticide; ectoparasiticide in veterinary medicine  |
| 60. | N-(2-methoxyethyl)-N-nitrosourea                           | 108278702  | Used for research on carcinogenesis   |
| 61. | methyl methacrylate  | 80626      | Widely used for polymer synthesis   |
| 62. | 4-(methyl)benzenediazonium sulfate                         | 32066798   | Used for research on carcinogenesis   |
| 63. | 3'-methyl-4-dimethylamino-azobenzene                       | 55801      | Used for research on carcinogenesis   |
| 64. | 4-methylquinoline  | 491350     | Used for research on carcinogenesis   |
| 65. | mexacarbate  | 315184     | Pesticide for control of insects and mites  |
| 66. | molybdenum trioxide  | 1313275    | Used in alloys and as catalyst  |
| 67. | MX (3-chloro-4-(dichloro-methyl)-5-hydroxy-2(5H)-furanone) | 77439760   | Chlorination byproduct/water contaminant  |
| 68. | 1,5-naphthalenediamine                                     | 2243621    | Chemical intermediate   |
| 69. | nithiazide   | 139946     | Antiprotozoan drug in poultry   |
| 70. | 4-(5-nitro-2-furyl)thiazole                                | 53757281   | Used for research on carcinogenesis   |
| 71. | 6-nitrobenzimidazole                                       | 94520      | Used in photographic developers   |
| 72. | nitrosoazetidine   | 15216101   | Component of tobacco smoke  |
| 73. | N-nitrosomethyl-N-heptylamine                              | 16338991   | Used for research on carcinogenesis   |
| 74. | N-nitroso-N-pentylurea, (N-amyl-N-nitrosourea)             | 10589749   | Used for research on carcinogenesis   |
| 75. | nucleoside analogues                                       | ---        | Anti-viral, -fungal, -psoriasis, and  |

| No.  | Chemical Name  | CAS Number | Remarks   |
|------|--|------------|---|
|      |  |            | chemotherapeutic drugs  |
| 76.  | omeprazole   | 73590586   | Antacid drug  |
| 77.  | oryzalin   | 19044883   | Herbicide   |
| 78.  | oxyfluorfen  | 42874033   | Herbicide   |
| 79.  | pendimethalin  | 40487421   | Selective herbicide   |
| 80.  | permethrin   | 52645531   | Insecticide, acaricide, and nematocide  |
| 81.  | petasitenine   | 60102376   | Used in folk medicine, herbal medicine  |
| 82.  | phenelzine sulfate   | 156514     | Antidepressant drug   |
| 83.  | 2-phenylphenol<br>(orthophenylphenol)                              | 90437      | Fungicide, plasticizer  |
| 84.  | phompsin A   | 64925800   | Mycotoxin produced by certain fungi   |
| 85.  | pivalolactone  | 1955459    | Intermediate in chemical synthesis  |
| 86.  | propoxur   | 114261     | Insecticide   |
| 87.  | ritalin (methylphenidate) and<br>its hydrochloride                 | 113451     | Drug for treatment of hyperactive<br>children   |
| 88.  | sesamol  | 533313     | Component of sesame seeds, used in<br>pharmaceutical and food industries                    |
| 89.  | simazine   | 122349     | Herbicide   |
| 90.  | sodium nitrite   | 7632000    | Food preservative   |
| 91.  | styrene  | 100425     | Synthesis of polymers   |
| 92.  | tetrachlorvinphos  | 22248-79-9 | Insecticide   |
| 93.  | tocopherol mix (E-mix 80 <sup>*</sup> )                            | 1406662    | Mixture of tocopherols including<br>vitamin E   |
| 94.  | triadimenol  | 55219653   | Fungicide   |
| 95.  | tribenuron methyl  | 101200480  | Herbicide   |
| 96.  | 2,4,6-trimethylaniline & its<br>hydrochloride<br>(aminomesitylene) | 88051      | Intermediate for chemical synthesis   |
| 97.  | trimethylthiourea  | 2489772    | Accelerator for rubber production and<br>curing agent                                       |
| 98.  | tris(2-ethylhexyl)phosphate<br>(trioctyl phosphate)                | 78422      | Flame retardant, plasticizer  |
| 99.  | troysan polyphase (IPBC)   | 55406536   | Wood preservative   |
| 100. | ziram  | 137304     | Accelerator for rubber production;<br>fungicide on food crops; pesticide (snail<br>control) |

\* Trade name